Shape-memory composite material used as spring, etc. - obtd. by connecting shape memory parts of e.g. nickel-tin alloy or polynorbornane-polystyrene-polybutadiene copolymer, with connector Patent Assignee: WING HIGHCERA KK (WING-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date Main IPC Week

Patent No Kind Date Applicat No Kind Date Main IPC Week JP 3023379 A 19910131 JP 89114280 A 19890509 199111 B

Priority Applications (No Type Date): JP 89114280 A 19890509

Abstract (Basic): JP 3023379 A

Material is obtd. by continuously connecting shape memory parts with a connector.

The shape memory parts pref. have different shape-recovery temps., including Ni-Ti alloy, Ni-Ti-Co alloy, Cu-Zn-Al alloy, and even shape memory resins such as polynorbornane-styrene-butadiene copolymer, etc. The connector is composed of aluminium, brass, iron alloy, conductive ceramics, etc.

USE/ADVANTAGE - Used as spring, etc. It can easily and controllably store three-dimensionally complicated shapes and workpiece can easily be taken out according to the recovery process of shapes during the shape recovery process with time. (9pp Dwg.No.0/4)

Derwent Class: A88; L03; M26; Q55

International Patent Class (Additional): B29C-061/06; B29C-065/00; C22C-019/03; F03G-007/06